

intermediate-frequency signal having a predetermined frequency, wherein the local oscillator outputs an oscillation signal having a frequency band of at least 803 to 473 MHz, wherein the dividing rate of the second programmable divider is  $1/3$ , and wherein the dividing rate of the third programmable divider is  $1/9$ .

26. The TV receiving tuner according to claim 4, wherein the tuner comprises a third programmable divider for receiving the oscillation signal of the local oscillator and dividing the oscillation signal and a fourth mixer for mixing the received TV signal and the output of the third programmable divider and frequency converting the received TV signal into an intermediate-frequency signal having a predetermined frequency, wherein the local oscillator outputs an oscillation signal having a frequency band of at least 824 to 530 MHz, wherein the dividing rate of the second programmable divider is  $1/3$ , and wherein the dividing rate of the third programmable divider is  $1/4$ .

27. The TV receiving tuner according to claim 4, wherein the tuner comprises a third programmable divider for receiving the oscillation signal of the local oscillator and dividing the oscillation signal and a fourth mixer for mixing the received TV signal and the output of the third programmable divider and frequency

converting the received TV signal into an intermediate-frequency signal having a predetermined frequency, wherein the local oscillator outputs an oscillation signal having a frequency band of at least 767 to 473 MHz, wherein the dividing rate of the second programmable divider is  $1/3$ , and wherein the dividing rate of the third programmable divider is  $1/6$ .